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			PHAM, QUANG		
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER	
			2612		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)				
Office Action Comment	10/586,738	ATHERTON, PETER SAMUEL				
Office Action Summary	Examiner	Art Unit				
	QUANG D. PHAM	2612				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	;			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 16 De	ecember 2011.					
, , , , , , , , , , , , , , , , , , , ,	action is non-final.					
3) An election was made by the applicant in response		set forth during the inte	rview on			
; the restriction requirement and election	·	-				
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
5) Claim(s) <u>1,2,4,6-9 and 12-17</u> is/are pending in	the application					
5a) Of the above claim(s) is/are withdraw						
6) Claim(s) is/are allowed.						
7) Claim(s) <u>1,2,4,6-9 and 12-17</u> is/are rejected.						
8) Claim(s) is/are objected to.						
9) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
10) ☐ The specification is objected to by the Examiner	.					
11) The drawing(s) filed on is/are: a) acce		- - - - - - - - -				
- · · · · · · · · · · · · · · · · · · ·	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
12) The oath or declaration is objected to by the Exa			` '			
Priority under 35 U.S.C. § 119						
13) ☐ Acknowledgment is made of a claim for foreign	priority under 35 LLS C & 110(a)	-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 0.5.5. § 119(a)	-(d) Of (f).				
· — <u> </u>	s have been received					
	<u> </u>					
·	application from the International Bureau (PCT Rule 17.2(a)).					
• •	* See the attached detailed Office action for a list of the certified copies not received.					
		-				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) ☐ Notice of Informal P 6) ☐ Other:	atent Application				
	- <i>,</i>					

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Respond to Applicant's Arguments/Remarks

1. Applicant's arguments, see Remarks, filed 12/16/2011, with respect to the rejection(s) of claims 1-2, 4-5, 7-9, and 12-15 under 35 USC 103(a) (over Eberthard in view of Diprizio and Beigel), claims 6 and 16 under 35 USC 103(a) (over Eberthard in view of Diprizio and Beigel and further in view of Halope), and claim 17 under 35 USC 103(a) (over Eberthard in view of Diprizio and Beigel and further in view of Gustafson), has been fully considered and are not deemed persuasive.

On page 7 of Applicant's remarks, Applicant argues about the obviousness combination of the **Eberthard**, **Diprizio** and **Beigel** in the Office Action mailed on 06/16/2011 wherein the combination **Eberthard** discloses use of conductive pads 28 and 30, they are a direct coupling, not a "non-contact" coupling. There is no suggestion of using an induction loop or a capacitive coupling.

In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Here, as discussed in the Non-Final Office Action mailed on 06/16/2011, the Office action relied upon **Eberthard** to teach a printed antenna (FIG 1 the antenna 22) having the coupling regions (column 4 lines 34-37 and FIG. 1 first coupling region 28 and the second coupling region 30) to connect to the conductive members (column 4 lines 55-67 and FIG. 2 the first conductive member 38 and the second conductive member 40) of the RFID chip assembly

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(FIG. 1 the chip assembly 12). In addition, **Eberthard** discloses different methods of attaching the RFID chip to the RFID antenna (FIG. 1-14).

Further, Examiner provides **Diprizio** to disclose the radio frequency identification device (FIG. 1 RFID device 10) for use in application of identifying persons, places, or things (column 3 lines 1-4) comprising the first substrate (column 3 lines 7-16 and FIG. 1 the substrate 12), the conductive pattern having the first electrode and the second electrode (column 3 lines 39-67 and FIG. 1 the first electrode 14 and the second electrode 16), and the circuit (column 4 lines 1-14, FIG. 1 the circuit 18, and FIG. 2 the memory 22). In addition, **Diprizio** discloses the circuit of the radio frequency identification device comprising the second substrate (FIG. 2 the second substrate 20) wherein the circuit is electrically coupled to the first electrode and the second electrode by use of adhesive, conductive vias, **capacitive coupling**, or other suitable means of providing electrical connections between the circuit and the first and second electrode (column 4 lines 44-51 and FIG. 2).

Furthermore, Examiner provides **Beigel** to disclose a method wherein the RFID antenna coupled to the RFID chip in <u>a non-contact coupling</u>, e.g. appropriate frequencies, <u>capacitive</u>, <u>inductive</u>, or lumped reactive, etc. to reduce the need for the electrical connection between the RFID chip and the RFID antenna through the substrate (abstract, column 2 lines 29 – column 3 lines 2, and FIG. 1).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include in the method of attaching RFID module to an item of **Eberthard**, wherein the coupling between the RFID circuit chip and the RFID antenna being a non-contact electrical coupling, as taught by **Diprizio** and **Beigel**, for the purpose of reducing the

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need for the electrical connection between the RFID chip and the RFID antenna through the substrate (**Beigel**: column 2 lines 63 – column 3 lines 2) and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, and **Beigel**. As a result, the rejections are sustained (see rejections below) and Applicant's arguments are not deemed persuasive.

Therefore, due to the claimed amendments, upon further consideration, a new ground of rejections necessity by amendments is made in view of following reference/combinations.

Examiner Notes

2. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1-2, 4, 7-9, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eberthard et al. (Eberthard – US 6,107,920) in view of Diprizio et al. (Diprizio – US 6,384,727 B1) and further in view of Beigel (Beigel – US 6,181,287 B1).

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(1). As to **claim 1**, **Eberthard** discloses radio frequency identification tag having an article integrated antenna. Further, **Eberthard** discloses *a method*, *comprising*:

providing an RF antenna (FIG. 1 the antenna 22) on an item (abstract, column 3 lines 47 – column 4 lines 2, column 4 lines 17-23, FIG. 1 the article 10);

providing a RFID electronics module (FIG. 1 the RFID tag circuit chip 12), the module electrically coupling the RFID electronics module to the RF antenna (FIG. 1 the antenna 22) on the item after the RF antenna is provided on the item (abstract, column 4 lines 17-23, column 4 lines 34-44, FIG. 1, and FIG. 2);

providing the RF antenna (FIG. 1 the antenna 22) with a first set of electrically conductive pads (column 4 lines 34-37 and FIG. 1 the first coupling region 28 and FIG. 1 the second coupling region 30);

<u>providing the RFID electronics module</u> (FIG. 1 the chip assembly 12) <u>with a second set</u> <u>of electrically conductive pads</u> (column 4 lines 55-67 and FIG. 2 the first conductive member 38 and the second conductive member 40).

thereby providing an RFID module capability for the item (column 4 lines 10-15, column 5 lines 33-40, and FIG. 1).

Except for the claimed limitations of the module being a chip mounted on a substrate and the coupling being a non-contact electrical coupling and aligning the first and second set of

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electrically conductive pads in a predetermined manner relative to each other when attaching the RFID electronics module to the item.

In the same art of RFID design, **Diprizio** discloses the radio frequency identification device (FIG. 1 RFID device 10) for use in application of identifying persons, places, or things (column 3 lines 1-4) comprising the first substrate (column 3 lines 7-16 and FIG. 1 the substrate 12), the conductive pattern having the first electrode and the second electrode (column 3 lines 39-67 and FIG. 1 the first electrode 14 and the second electrode 16), and the circuit (column 4 lines 1-14, FIG. 1 the circuit 18, and FIG. 2 the memory 22). Further, **Diprizio** discloses the circuit of the radio frequency identification device comprising the second substrate (FIG. 2 the second substrate 20) wherein the circuit is electrically coupled to the first electrode and the second electrode by use of adhesive, conductive vias, capacitive coupling, or other suitable means of providing electrical connections between the circuit and the first and second electrode (column 4 lines 44-51 and FIG. 2).

In the same art of RFID design, **Beigel** discloses a method wherein the RFID antenna coupled to the RFID chip in a non-contact coupling, e.g. appropriate frequencies, capacitive, inductive, or lumped reactive, etc. to reduce the need for the electrical connection between the RFID chip and the RFID antenna through the substrate (abstract, column 2 lines 29 – column 3 lines 2, and FIG. 1).

Therefore, in view of **Eberthard**, **Diprizio** and **Beigel**'s teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include in the method of attaching RFID module to an item of **Eberthard**, the RFID tag circuit chip mounted on the substrate, as taught by **Diprizio**, for the purpose of conveniently apply the RFID

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circuit chip to the RFID antenna, further to include in the method of attaching RFID module to an item of **Eberthard** and **Diprizio**, wherein the coupling between the RFID circuit chip and the RFID antenna being a non-contact electrical coupling, whereby <u>aligning the first and second set of electrically conductive pads in a predetermined manner relative to each other when attaching the RFID electronics module to the item, as taught by **Diprizio** and **Beigel**, for the purpose of reducing the need for the electrical connection between the RFID chip and the RFID antenna through the substrate (**Beigel**: column 2 lines 63 – column 3 lines 2) and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, and **Beigel**.</u>

- (2). As to **claim 2**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 1**. Further, **Eberthard** discloses the method wherein electrically coupling comprises attaching the RFID module to the item to provide an RFID function for the item (abstract, column 4 lines 10-15, column 4 lines 17-23, column 4 lines 34-44, column 5 lines 33-40, FIG. 1, and FIG. 2).
- (3). As to claim 4, Eberthard, Diprizio, and Beigel disclose the limitations of claim 1 except for the claimed limitations of the method wherein the item includes an inside surface and an outside surface and further comprising providing the RF antenna on the inside surface of the item and attaching the RFID electronics module in an adjacent position to the outside surface of the item.

Eberthard discloses the method printing antenna inside the surface of the item in order to reduce the orientation sensitivity of the RFID tag, for instance (column 10 lines 3-42 and FIG. 15 the antenna element 424 and 426). **Eberthard** discloses different method of attaching the RFID chip to the RFID antenna (FIG. 1-14). In addition, **Eberthard** discloses RFID chip is in an adjacent position to the outside surface of the item when the antenna is printed on the inside

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surface of the item (column 8 lines 10-33 and FIG. 11). Therefore, in **Eberthard**, **Diprizio**, and **Beigel**'s teaching, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the method wherein the item includes an inside surface and an outside surface and further comprising providing the RF antenna on the inside surface of the item and attaching the RFID electronics module in an adjacent position to the outside surface of the item, as taught by **Eberthard**, in the method of attaching the RFID module to an item of **Eberthard**, **Diprizio**, and **Beigel**, for the purpose of reducing the orientation sensitivity of the RFID tag and protecting the RFID tag from damage by placing the RFID chip below the surface of the item and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, and **Beigel**.

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- (4). As to **claim 7**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 1**. Further, **Eberthard** the method <u>further</u> comprising, providing the RFID electronics module (FIG. 1 the RFID tag circuit chip 12) separate from the item (FIG. 1) and the RF antenna on the item (FIG. 1 the first surface 18), and applying the RFID electronics module to the item after applying the RF antenna to the item (abstract, column 4 lines 17-23, column 4 lines 34-44, FIG. 1, and FIG. 2).
- (5). As to **claim 8**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 7**. Further, **Eberthard** discloses the method further comprising: providing alignment features (FIG. 1 the first coupling region 28 and the second coupling region 30) on the item and positioning the RFID electronics module on the item based on a location of the alignment features (column 4 lines 29-44).

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(6). As to **claim 9**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 7**. Further, **Eberthard** discloses the method further comprising providing an adhesive on the RFID electronics module; and applying the RFID electronics module to the item by means of the adhesive (column 4 lines 29-44 and FIG. 2 the anisotropic adhesive 34).

- (7). As to **claim 12**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 7**. Further, **Eberthard** discloses the method wherein applying the RF antenna to the item comprises printing the RF antenna on the item (column 4 lines 16-23).
- (8). As to claim 13, Eberthard, Diprizio, and Beigel disclose the limitations of claim 12. Further, Eberthard discloses the method wherein the RF antenna is printed on the item using electrically conductive ink (column 4 lines 16-29).
- (9). As to **claim 14**, **Eberthard** discloses radio frequency identification tag having an article integrated antenna. Further, **Eberthard** discloses *in combination, an item* (column 3 lines 56 column 4 lines 2 and FIG. 1 the article 10) *having at least one surface* (FIG. 1 the first surface of the article 15) *and an RF antenna* (FIG. 1 the antenna 22) *applied to the surface* (FIG. 1); *and an RFID electronics module* (FIG. 1 the RFID tag circuit chip 12) *separate from the item and from the RF antenna on the item* (FIG. 1), *the RFID electronics module including electronics which provide an RFID capability when coupled to the RF antenna* (column 4 lines 10-15, column 5 lines 33-40, and FIG. 1), *the RFID electronics module being applied to the item so as to be electrically coupled to the RF antenna and provide an RFID capability for the item* (abstract, column 4 lines 17-23, column 4 lines 34-44, FIG. 1, and FIG. 2).

Except for the claimed limitations of the RFID electronics module being a chip fixed to a substrate, the RF antenna being coupled to the RFID electronics module by a non-contact

coupling, and wherein the RF antenna and module have engaged electrically conductive pads aligned in a predetermined manner relative to each other when the RFID electronics module is applied to the items so as to provide the electrical coupling.

Eberthard to disclose the method of printing antenna (FIG 1 the antenna 22) having the coupling regions (column 4 lines 34-37 and FIG. 1 first coupling region 28 and the second coupling region 30) to connect to the conductive members (column 4 lines 55-67 and FIG. 2 the first conductive member 38 and the second conductive member 40) of the RFID chip assembly (FIG. 1 the chip assembly 12). In addition, **Eberthard** discloses different methods of attaching the RFID chip to the RFID antenna (FIG. 1-14).

In the same art of RFID design, **Diprizio** discloses the radio frequency identification device (FIG. 1 RFID device 10) for use in application of identifying persons, places, or things (column 3 lines 1-4) comprising the first substrate (column 3 lines 7-16 and FIG. 1 the substrate 12), the conductive pattern having the first electrode and the second electrode (column 3 lines 39-67 and FIG. 1 the first electrode 14 and the second electrode 16), and the circuit (column 4 lines 1-14, FIG. 1 the circuit 18, and FIG. 2 the memory 22). Further, **Diprizio** discloses the circuit of the radio frequency identification device comprising the second substrate (FIG. 2 the second substrate 20) wherein the circuit is electrically coupled to the first electrode and the second electrode by use of adhesive, conductive vias, capacitive coupling, or other suitable means of providing electrical connections between the circuit and the first and second electrode (column 4 lines 44-51 and FIG. 2).

In the same art of RFID design, **Beigel** discloses a method wherein the RFID antenna coupled to the RFID chip in a non-contact coupling, e.g. appropriate frequencies, capacitive,

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inductive, or lumped reactive, etc. to reduce the need for the electrical connection between the

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RFID chip and the RFID antenna through the substrate (abstract, column 2 lines 29 – column 3

lines 2, and FIG. 1).

Therefore, in view of **Eberthard**, **Diprizio** and **Beigel**'s teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include in the method of attaching RFID module to an item of **Eberthard**, the RFID tag circuit chip fixed to the substrate, as taught by **Diprizio**, for the purpose of conveniently apply the RFID circuit chip to the RFID antenna, further to include in the method of attaching RFID module to an item of **Eberthard** and **Diprizio**, wherein the coupling between the RFID circuit chip and the RFID antenna being a non-contact electrical coupling, and wherein the RF antenna and module have engaged electrically conductive pads aligned in a predetermined manner relative to each other when the RFID electronics module is applied to the items so as to provide the electrical coupling as taught by **Diprizio** and **Beigel**, for the purpose of reducing the need for the electrical connection between the RFID chip and the RFID antenna through the substrate (**Beigel**: column 2 lines 63 – column 3 lines 2) and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, and **Beigel**.

(10). As to **claim 15**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 14**. Further, **Eberthard** discloses *the combination further comprising an adhesive attaching the RFID electronics module to the item* (column 4 lines 29-44 and FIG. 2 the anisotropic adhesive 34).

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5. Claims 6 and 16 are rejected under 35 USC 103(a) as being unpatentable over Eberthard in view of Diprizio and Beigel and further in view of Halope et al. (Halope – US 6,770,509 B2).

(1). As to **claim 6**, **Eberthard**, **Diprizio**, and **Beigel** discloses the limitations of **claim 1** except for the claim limitations of *the method further comprising providing a dielectric between* the RF antenna and the RFID electronic module.

In the same art of producing RFID tags, **Halope** discloses a method comprising steps of applying the dielectric material between the RFID chip and the RFID antenna to maintain the position of the RFID chip (abstract, column 2 lines 57-63, column 3 lines 25-35, and FIG. 3 the adhesive dielectric material 20).

Therefore, in view of **Eberthard**, **Diprizio**, **Beigel**, and **Halope**'s teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the method further comprising providing a dielectric between the RF antenna and the RFID electronic module, as taught by **Halope**, in the method of attaching RFID module to an item of **Eberthard**, **Diprizio**, and **Beigel**, for the purpose of maintaining the RFID chip position relative to the contacts by applying the adhesive electric material between the RFID chip and the RFID antenna and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, **Beigel**, and **Halope**.

(2). As to **claim 16**, **Eberthard**, **Diprizio**, and **Beigel** discloses the limitations of **claim 14** except for the claim limitations of *the combination further comprising a dielectric between the RFID electronics module and the RF antenna*.

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In the same art of producing RFID tags, **Halope** discloses a method comprising steps of applying the dielectric material between the RFID chip and the RFID antenna to maintain the position of the RFID chip (abstract, column 2 lines 57-63, column 3 lines 25-35, and FIG. 3 the adhesive dielectric material 20).

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Therefore, in view of **Eberthard**, **Diprizio**, **Beigel**, and **Halope**'s teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the method further comprising providing a dielectric between the RF antenna and the RFID electronic module, as taught by **Halope**, in the method of attaching RFID module to an item of **Eberthard**, **Diprizio**, and **Beigel**, for the purpose of maintaining the RFID chip position relative to the contacts by applying the adhesive electric material between the RFID chip and the RFID antenna and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, **Beigel**, and **Halope**.

6. Claim 17 is rejected under 35 USC 103(a) as being unpatentable over Eberthard in view of Diprizio and Beigel and further in view of Gustafson (Gustafson – US 6,050,622).

As to **claim 17**, **Eberthard**, **Diprizio**, and **Beigel** disclose the limitations of **claim 14** except for the claimed limitations of *the combination wherein the RFID module is adapted to have its RFID capability modified if the RFID electronics module is tampered or removed from the item.*

In the same art of designing RFID tag, **Gustafson** discloses a method wherein the function of the RFID tag is modified if the RFID tag is removed from the item (abstract, column 6 lines 35-50, and FIG. 6).

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Therefore, in view of **Eberthard**, **Diprizio**, **Beigel**, and **Gustafson**'s teachings, it would have been obvious to one of the ordinary skill in the art at the time of the claimed invention to include the combination wherein the RFID module is adapted to have its RFID capability modified if the RFID electronics module is tampered or removed from the item, as taught by **Gustafson**, in the combination of attaching the RFID module to an item of **Eberthard**, **Diprizio**, and **Beigel**, for the purpose of disabling the RFID function in order to prevent the re-usage of the RFID tag or to detect the tampering of the RFID tag and the result would have been predictable in the combination of **Eberthard**, **Diprizio**, **Beigel**, and **Gustafson**.

Citation of Pertinent Art

- 7. The prior are made of record and not relied upon is considered pertinent to applicant's disclosure:
 - a. Takatori et al., US 2001/0020897 A1, discloses tag IC.
- b. Ward, JR, US 2002/0053973 A1, discloses impedance matching network and multidimensional electromagnetic field coil for a transponder interrogator.
- c. Serra, US 2003/0112143 A1, discloses contactless electronic tag for three-dimensional object.
- d. Shafer, US 2003/0231106 A1, discloses radio frequency identification tag with this-film battery for antenna.
 - e. Jesser, US 2004/0046663 A1, discloses RFID tag assembly and system.
 - f. Turner, US 2004/0217865 A1, discloses RFID tag.
- g. Eberthard, US 6,018,299, discloses radio frequency identification tag having a printed antenna and method.

h. Eberthard et al., US 6,130,613, discloses radio frequency identification stamp and radio frequency identification mailing label.

- i. Cole, US 6,172,608 B1, discloses enhanced range transponder system.
- j. Eberthard, US 6,246,327 B1, discloses radio frequency identification tag circuit chip having printed inter-connection pads.
- k. Blama et al., US 6,304,169 B1, discloses inductor-capacitor resonant circuits and improved methods of using same.
 - 1. Credelle et al., US 6,606,247 B2, discloses multi-feature-size electronic structures.
- m. Kayamakis et al., US 7,116,231 B2, discloses method of producing a contactless chip card or a contact/contactless hybrid chip card with improved flatness.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to QUANG PHAM whose telephone number is (571)-270-3668.

The examiner can normally be reached on Monday - Thursday 9:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, BENJAMIN LEE can be reached on (571)-272-2963. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/QUANG PHAM/

Examiner, Art Unit 2612

/BENJAMIN C. LEE/

Supervisory Patent Examiner, Art Unit 2612